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### NPL Fact Sheets for Illinois:

#### OUTBOARD MARINE CORP.

#### EPA REGION 5

Lake County

Waukegan

EPA ID# ILD000802827

US EPA RECORDS CENTER REGION 5



442760

10<sup>th</sup> Congressional District

Last Update: January 2003

#### Site Description

The Outboard Marine Corporation, Inc. (OMC) site is located around the upper Waukegan Harbor area in Waukegan, Ill. The site contains three cleanup parcels, called "operable units" (OU). The Waukegan Harbor (WH) site is OU #1 and OU #3 and the Waukegan Manufactured Gas and Coke Plant (WCP) site is OU #2. The now-abandoned OMC Plant 2 site may soon be added to the OMC National Priorities List (NPL) site description as OU #4 (see Figure 1).

Land use in the immediate area of the OMC site is marine-recreational and industrial, although there is a public beach on the east side of the WCP site. OMC, Inc., declared Chapter 13 bankruptcy in December 2000 and, after failing to reorganize, began liquidation in August 2001. Subsequently, the City of Waukegan has purchased the WCP site and has reportedly acquired options on portions of the OMC Plant 2 property. The WCP site has been rezoned to high-density residential and the city and other entities are working to revitalize the Waukegan lakefront; therefore, land-use assumptions in the vicinity of the site may be changing in the coming years.

The WH site is contaminated with polychlorinated biphenyls (PCBs). **OMC PCBs** - From approximately 1948 to 1971, OMC purchased an estimated 8 million gallons of hydraulic fluid which contained PCBs for die casting of outboard marine/recreational engines. PCBs were discharged through floor drains into a tributary of Lake Michigan and were ultimately discharged to Waukegan Harbor. As a result, 700,000 pounds of PCBs were estimated to be present on OMC property soils and 300,000 pounds of PCBs in the soils and sediments of Waukegan Harbor.

The WCP site is contaminated with coal tar and creosote. **WCP** - In the early 1900s a wood treating plant operated on the site, followed by a manufactured gas plant in the 1920s and a coke oven gas plant in the 1940s. The plant was purchased and disassembled by OMC in approximately 1972. Between 1973 and 1989, OMC used the site for fire training. Other more current uses include waste oil storage, parking, stockpiling of sand from a dredging operation, and testing of snowmobiles.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible party actions.

#### NPL Listing

Proposed Date: 12/30/82

#### History:

Final Date: 09/08/83

#### Threats and Contaminants

The WH site is contaminated with PCBs, although at lower levels than in previous years due to a cleanup action that was completed in the early 1990s (see next section). As of the time of the cleanup action, upper harbor sediment PCB levels averaged less than 50 mg/kg ("parts per million" or ppm). However, current data suggest that a lower cleanup level should be applied to similar PCB sediment cleanup actions around the country. Thus, the PCBs in the WH site sediments could still be affecting benthic organisms as well as fish in the harbor. Humans could be exposed to PCBs by consuming fish caught in the harbor that have accumulated PCBs in their fatty tissues. The State of Illinois monitors PCB levels in harbor fish on a yearly basis; also, a lake-wide fish consumption advisory is in effect. These methods are being used to protect human health until future PCB cleanup actions can be completed.

Soil at the WCP site is contaminated with coal tar and creosote from previous site operations. Site groundwater is contaminated in some areas with ammonia, arsenic, phenol, and benzene. Until the required cleanup actions are completed, humans could be exposed to the soil contaminants by accidental contact or ingestion and to the groundwater contaminants by ingestion. The WCP site is fenced to prevent casual contact with soil contaminants and no one will be allowed to use the groundwater as a source of potable water.

OMC Plant 2 was abandoned by the OMC bankruptcy trustee in December 2002. Current data available to the U.S. EPA on site contaminants, although incomplete, show that the site soil is contaminated with PCBs and groundwater and soil beneath the plant is contaminated with various chlorinated volatile organic compounds (VOCs), including trichloroethene (TCE) and vinyl chloride. Humans could be exposed to the soil contaminants by accidental contact or ingestion and to the groundwater contaminants by ingestion. The OMC Plant 2 site is fenced to prevent casual contact with soil contaminants and no one will be allowed to use the groundwater as a source of potable water.

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## Cleanup Progress

**OMC** - By 1980, sampling had been conducted in the WH and at the OMC site. In 1984, a Record of Decision (ROD) selecting a mixture of onsite containment and offsite disposal was issued by the U.S. EPA. Design work began in 1985 but was halted due to litigation between the U.S. EPA and OMC regarding access to the site. OMC subsequently submitted their own proposal to clean up the site and in 1989, the U.S. EPA and OMC entered into a Consent Decree implementing OMC's cleanup proposal, and the decision was amended in 1989. Construction began in 1990, including dredging of the harbor, onsite treatment of certain high concentration wastes, construction of three onsite containment cells and consolidation of contaminated soils and sediments within those cells, installation of groundwater extraction wells in the cells, construction of a new harbor slip and, most recently, construction of three onsite water treatment systems. All construction is complete. It is anticipated that water will be removed from the cells and treated for an extended period of time.

**WH site** - The U.S. EPA sampled the sediments in the harbor and some soil areas around the (then operating) OMC Plant 2 for PCBs in the early 1980s. We selected a cleanup action in a ROD that we issued in May 1984. The selected cleanup action included the dredging of PCB-contaminated sediments in the harbor and of PCB-contaminated soils and sediments in certain areas of OMC Plant 2 to meet a 50 ppm cleanup level. Some of the dredged or excavated material was to be contained in disposal cells built on the OMC Plant 2 site and some was to be disposed of offsite. Later, as we began to design the cleanup remedy, we were sued by OMC and work was halted until a resolution could be reached.

Still later, in 1989, OMC submitted an alternative cleanup plan for U.S. EPA approval. We approved the alternative plan in a 1989 ROD Amendment. OMC began to implement the new cleanup plan in 1990 and completed all cleanup construction work by 1994. The new plan consisted of the dredging of the harbor area to achieve a PCB cleanup level of 50ppm, the creation of a new boat slip in the harbor and the closing of an old slip, and the excavation of certain surface soils and sediments around OMC Plant 2 to meet the PCB cleanup level. Sediments from the old slip and certain highly contaminated soils from the OMC Plant 2 area were thermally treated onsite to remove the PCBs for off site destruction. The rest of the excavation and dredging spoils, along with the treated soil and sediment, were placed into three containment cells that were built on the WH site.

The three containment cells are located in the old harbor boat slip and on the north side of OMC Plant 2. Each cell has vertical subsurface barrier walls around them and a barrier layer on the top. OMC installed several groundwater extraction wells in each cell to prevent the release of PCBs into the environment from the cells. Water is periodically pumped from the cells to create an inward gradient so if there is a breach in the barrier walls, groundwater will flow into the cells instead of out. The pumped water is treated to remove PCBs and then released into the harbor. The cells will require someone to operate and maintain them for many years. Currently, the U.S. EPA is undertaking this work; later this year, however, the Illinois EPA (IEPA) will be in charge of operating and maintaining the cells.

Future cleanup actions for the WH site are being evaluated by the U.S. EPA and the IEPA.

**WCP** - This site was discovered when implementing the WH PCB cleanup. the U.S. EPA and the North Shore Gas Company entered into an Administrative Order on Consent in September 1990 for completion of a Remedial Investigation and Feasibility Study (RI/FS). The RI was completed in February 1995 and a final FS was released in November 1998.

The U.S. EPA signed a ROD on September 30, 1999, for the final cleanup of the site. Groundwater will be cleaned up to remove arsenic, ammonia, and benzene; soils will be excavated and treated to stabilize PAH and arsenic. The design phase for this work began in 2001 and will be completed in 2003. Cleanup work will begin in fall 2003 and continue through 2007.

**OMC Plant 2 site** - Before OMC Plant 2 could be abandoned by the OMC bankruptcy trustee, the U.S. EPA and the IEPA reached an agreement with the trustee whereby the trustee would perform some cleanup actions inside the plant. These actions included the removal of certain waste chemicals and the cleanup of some machinery. Now that the plant has been abandoned, the U.S. EPA is planning to perform additional interior cleanup work to prevent the release of PCBs and other compounds into the environment. This work is scheduled for spring 2003.

The U.S. EPA and the IEPA are also planning to expand the Outboard Marine Corporation NPL site description to include OMC Plant 2 as the fourth OU. Afterwards, we will perform an RI/FS at the site to determine the nature and extent of residual contaminants and design an appropriate cleanup approach. As this could take several years to complete, we will also be looking at undertaking interim expedited cleanup actions as necessary to prevent the release of contamination into the harbor or Lake Michigan..

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